



PATENT  
Customer No. 22,852  
Attorney Docket No. 03495.0202

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
)  
Gouzel KARIMOVA et al. ) Group Art Unit: 1652  
)  
Application No.: 09/818,939 ) Examiner: S. Swope  
)  
Filed: March 28, 2001 ) Confirmation No.: 9624  
)  
For: IMPROVEMENTS TO BACTERIAL )  
TWO-HYBRID SYSTEM FOR )  
PROTEIN INTERACTION )  
SCREENING, NEW STRAINS )  
FOR USE THEREIN, AN THEIR )  
APPLICATIONS )

Commissioner for Patents  
Washington, DC 20231

Sir:

**INFORMATION DISCLOSURE**  
**STATEMENT UNDER 37 C.F.R. § 1.97(c)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final action, Quayle action, or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c), this Information Disclosure Statement is accompanied by a fee of \$180.00 as specified by Section 1.17(p).

Copies of the listed documents, including any copending patent applications, are attached.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claims in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

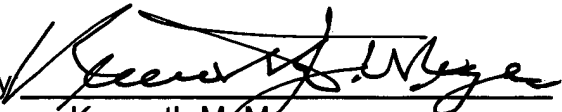
Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

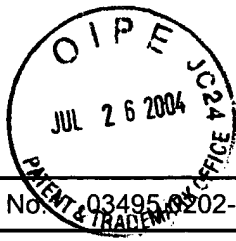
If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: July 26, 2004

By   
Kenneth M. Meyers  
Reg. No. 25,146



## INFORMATION DISCLOSURE CITATION

Atty. Docket No.	03495-0202-00000	Appln. No.	09/818,939	Examiner:	S. Swope
Applicant	Gouzel KARIMOVA et al.				
Filing Date	March 28, 2001	Group:	1652		

## U.S. PATENT DOCUMENTS

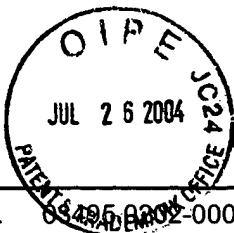
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	5,468,614	11/21/95	Fields et al.			
	6,333,154 B1	12/25/01	Ladant et al.			
	US 2002/0106783 A1	08/08/02	Ladant et al.			

## FOREIGN PATENT DOCUMENTS

Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
WO 01/73108 A2	10/04/01	PCT			
WO 01/73108 A3	10/04/01	PCT			
WO 99/28746	06/10/99	PCT			
WO 96/40987	12/19/96	PCT			
WO 98/34120	08/06/98	PCT			

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

International Search Report dated 21 April 1999, for PCT/IB98/02085.
International Search Report dated 22 August 2002, for PCT/IB01/00775.
Ladant, et al. "Characterization of the Calmodulin-binding and of the Catalytic Domains of <i>Bordetella pertussis</i> Adenylate Cyclase," The Journal of Biological Chemistry, vol. 264, no. 7, 5 March 1989, pp. 4015-4020.
Glaser, P. et al., "Molecular Characterization of Two <i>cya</i> Mutations, <i>cya</i> -854 and <i>cya</i> R1," J. Bacterial., Vol. 171, pp. 5176-5178 (1989).
Glaser, P. et al., "Identification of Residues Essential for Catalysis and Binding of Calmodulin in <i>Bordetella Pertussis</i> Adenylate Cyclase by Site-Directed Mutagenesis," EMBO Journal, vol. 8, No. 3, 1 March 1989, pp. 967-972.
Karimova, G. et al., "A Bacterial Two-Hybrid System Based on a Reconstituted Signal Transduction Pathway," Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 5752-5756 (1998).
Sancar, A. et al., "Physical Map of the <i>recA</i> Gene," Proc. Natl. Acad. Sci. USA, Vol. 76, pp. 3144-3148.
Wanner, B.L. et al., "Novel Regulatory Mutants of the Phosphate Regulon in <i>Escherichia coli</i> K-12," J. Mol. Biol., Vol. 191, pp. 39-58.
Pelletier, J. et al. "A Protein Complementation Assay for Detection of Protein-Protein Interactions in Vivo," Protein Engineering, vol. 10, No. Suppl. 01, 1 October 1997, p. 89.



OMB No. 0651-0011

## INFORMATION DISCLOSURE CITATION

Atty. Docket No.	05495, 0201-00000	Appln. No.	09/818,939	Examiner:	S. Swope
Applicant	Gouzel KARIMOVA et al.				
Filing Date	March 28, 2001	Group:	1652		

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Rossi et al., "Monitoring Protein-Protein Interactions in Intact Eukaryotic Cells by Beta-Galactosidase Complementation," Proceedings of the National Academy of Sciences of USA, vol. 94, August 1997, pp. 8405-8410.
	Copy of U.S. Patent Application No. 10/240,102, filed March 29, 2001 (Attorney Docket No. 05394.0017).

Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
Form PTO 1449	Patent and Trademark Office - U.S. Department of Commerce